

Wyoming Department of Environmental Quality
Water Quality Division
WYPDES Program

Statement of Basis

RENEWAL

APPLICANT NAME: Pinnacle Gas Resources, Inc.

MAILING ADDRESS: 1 East Alger, Suite 206
Sheridan, WY 82801

FACILITY LOCATION: Squaw Creek Development, which is located in the NENW of Section 3 in Township 55 North, Range 73 West; and in the NESW, SESE, and SENW of Section 34, the NESW and NWNW of Section 35, the NENW of Section 36, and the NESE of Section 26, all in Township 56 North, Range 73 West, Campbell County. The produced water will be discharged into eight on-channel reservoirs (class 4B) located in ephemeral tributaries (class 4B) of White Tail Creek (class 4B), which is tributary to the Little Powder River (class 2AB). The daily maximum permitted flow rate for this facility is 1.11 MGD. The permit requires that the produced water being discharged at this facility originate in one or more of the following formations: the Canyon, Cook, Wall, and/or Pawnee coal seams.

NUMBER: WY0045799

This permit was revised following its public notice period, to include Part I.C.2 , relating to requirements for bonding on-channel reservoirs at this facility.

The following updates are incorporated into this permit renewal:

- 1. Effluent limits and routine monitoring requirements for total petroleum hydrocarbons, total radium 226, sulfate, and dissolved manganese are being removed from the permit, as the discharge has been demonstrated to have no potential to exceed water quality standards for these constituents.*

Facility Description

This facility is a typical coal bed methane production facility in which groundwater is pumped from a coal bearing formation resulting in the release of methane from the coal bed. The permit authorizes the discharge to the surface of groundwater produced in this way provided the effluent quality is in compliance with effluent limits that are established by this permit. In developing effluent limits, all federal and state regulations and standards have been considered and the most stringent requirements

incorporated into the permit. The EPA Effluent Guidelines and Standards for Oil and Gas Extraction Point Source Category (Part 435, Subpart E) predate the development of coal bed methane extraction technology; however the technology is similar enough to conventional gas extraction that, in the professional judgment of the WDEQ, this effluent limit guideline is appropriately applied to coal bed methane gas production. This permit does not cover activities associated with discharges of drilling fluids, acids, stimulation waters or other fluids derived from the drilling or completion of the wells.

The permittee has chosen option 2 of the coal bed methane permitting options. Under this permitting option, the produced water is discharged to a receiving stream which is eventually tributary to a class 2AB perennial water of the state. The permit establishes effluent limits for the end of pipe, which are protective of all the designated uses defined in Chapter 1 of Wyoming Water Quality Rules and Regulations. This may include drinking water, game and non-game fish, fish consumption, aquatic life other than fish, recreation, agriculture, wildlife, industry and scenic value. Based on a review of this permit application and previous applications in this area, it has been determined that no existing irrigation uses of surface water occur downstream from the facility on White Tail Creek.

The Wyoming DEQ has determined through review of the permit application and available information that effluent discharged from this facility is unlikely to reach the Little Powder River on a frequent or continual basis. The permittee has submitted a water budget which demonstrates that the effluent from this facility can be contained in the on-channel reservoirs at this site. Review of the permit application also reveals that this facility is located approximately 13 stream miles from the confluence with the Little Powder River. Maximum total effluent flow rate from this facility is limited to 1.11 MGD.

Effluent Limits

Permit effluent limits are based on federal and state regulations and are effective as of the date of issuance. The daily maximum effluent flow limit for this facility is 1.11 million gallons per day (MGD). The pH must remain within 6.5 and 9.0 standard units. Effluent limits for total dissolved solids (5,000 mg/l) and specific conductance (7,500 micromhos/cm) are included to protect for stock and wildlife watering. These limits are based upon Wyoming Water Quality Rules and Regulations, Chapter 7 and apply to discharge from any permitted outfall. In addition, the permit establishes a total barium limit of 1800 µg/l, a total arsenic limit of 2.6 µg/l, and a chlorides limit of 46 mg/l. These limits are based on standards for class 2AB waters which are intended to protect for the above listed designated uses and reflect the application of "tier two" anti-degradation protection as set forth in the *Wyoming Surface Water Quality Standards - Implementation Policies*. This permit also establishes a dissolved iron limit of 1000 µg/l which reflects the application of "tier one" anti-degradation protection for the class 3B immediate receiving water. Results are to be reported twice-yearly and if no discharge occurs then "no discharge" is to be reported.

This permit originally established a pH limit of 6.5-8.5 standard units, a dissolved manganese limit of 629 µg/l, a total petroleum hydrocarbons effluent limit of 10 mg/l, and a sulfate limit of 3000 mg/l at the end of pipe. *Chapter 1, Wyoming Water Quality Rules and Regulations*, adoption date June 27, 2001 establishes an effluent limit of 6.5-9.0 standard units for pH. Based upon this change, the WDEQ has revised the effluent limit for pH in this permit. Therefore, the pH effluent limits in this permit conform to the anti-backsliding requirements established in *Section 402(o).2.B.i of the Clean Water Act*. In addition, review of discharge monitoring report data for CBM facilities in Northeast Wyoming indicates that the maximum reported concentrations for sulfates, TPH, and dissolved manganese in the discharge were far below the water quality standards of 3000 mg/l for sulfate, 10 mg/l fo TPH, and 629 µg/l for dissolved manganese established in *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. Therefore, WDEQ has removed the effluent limits and monitoring requirements for sulfates and dissolved

manganese in this permit. Based on evaluation of the available data, it is WDEQ's determination that removing the sulfate, TPH, and dissolved manganese effluent limits and monitoring requirements from this permit conforms to the anti-backsliding requirements established in *Section 402(o).2.B.i of the Clean Water Act*.

This permit originally established a total radium²²⁶ limit of 60 pCi/l and a total petroleum hydrocarbons (TPH) limit of 10 mg/l at the end of pipe. Based upon water quality data collected by WDEQ since the time this permit was originally issued, a permitting approach for establishing total radium limits in coal bed methane permits has been developed. This approach is based upon the distance of the outfall from a class 2 water. The removal of the originally-established total radium²²⁶ limit is based on this permitting approach. Based on evaluation of the available data, it is WDEQ's determination that removing the total radium²²⁶ limit from this permit conforms to the anti-backsliding requirements established in *Section 402(o).2.B.i of the Clean Water Act*.

General Requirements

The permit also requires sampling at designated water quality monitoring stations located on the receiving stream (White Tail Creek), and on the perennial receiving water (the Little Powder River). (See Table 1, Part I.B.12 of the permit for water quality monitoring station location information).

Information gathered from the water quality monitoring stations may result in modification of the permit to protect existing uses on the tributary and the mainstem.

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of visible deposits of iron, hydrocarbons or any other constituent on the bottom or shoreline of the receiving water. In addition, erosion control measures will be implemented to prevent significant damage to or erosion of the receiving water channel at the point of discharge.

The discharge of wastewater and the effluent limits that are established in this permit have been reviewed to ensure that the levels of water quality necessary to protect the designated uses of the receiving waters are maintained and protected. An antidegradation review has been conducted and verifies that the permit conditions, including the effluent limitations established, provide a level of protection to the receiving water consistent with the antidegradation provisions of Wyoming surface water quality standards.

Self monitoring of effluent quality and quantity is required on a regular basis with reporting of results semiannually. The permit is scheduled to expire on December 31, 2008. This expiration date was determined through review of the watershed permitting schedule which the WDEQ is implementing in order to synchronize the permitting and expiration of facilities within the same watershed. This holistic approach will provide for more efficient permitting of point-source discharges.

Jason Thomas
Water Quality Division
Department of Environmental Quality
Drafted: August 14, 2006

AUTHORIZATION TO DISCHARGE UNDER THE
WYOMING POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, (hereinafter referred to as "the Act"), and the Wyoming Environmental Quality Act,

Pinnacle Gas Resources, Inc.

Is authorized to discharge from the wastewater treatment facilities serving the

Squaw Creek Development,

located in

the NENW of Section 3 in Township 55 North, Range 73 West; and in the NESW, SESE, and SENW of Section 34, the NESW and NWNW of Section 35, the NENW of Section 36, and the NESE of Section 26, all in Township 56 North, Range 73 West, Campbell County,

To receiving waters named

eight on-channel reservoirs (class 4B) located in ephemeral tributaries (class 4B) of White Tail Creek (class 4B), which is tributary to the Little Powder River (class 2AB)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.


This permit renewal shall become effective on the date of signature by the Director of the Department of Environmental Quality.

This permit and the authorization to discharge shall expire at midnight, December 31, 2008.



John F. Wagner
Administrator - Water Quality Division

10/27/06
Date



John V. Corra
Director - Department of Environmental Quality

10/29/06
Date

PART I**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Effective immediately and lasting through December 31, 2008, the quality of effluent discharged by the permittee shall, at a minimum, meet the limitations set forth below. The permittee is authorized to discharge from outfalls serial numbers 001-008.

1. **Discharges from outfalls 001 through 008 shall be limited as specified below:**

<u>Effluent Characteristic</u>	<u>Daily Maximum, Outfalls</u>
Chlorides, mg/l	46
pH, standard units	6.5 – 9.0
Specific Conductance, micromhos/cm	7500
Total Recoverable Arsenic, µg/l	2.6
Total Recoverable Barium, µg/l	1800
Total Dissolved Solids, mg/l	5000
Total Flow, MGD	1.11
Dissolved Iron, µg/l	1000

*Total flow is to be calculated as the sum of all discharge from all permitted outfalls

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any single grab sample.

This permit requires that the produced water being discharged by this facility originate in one or more of the following formations: the Canyon, Cook, Wall, and/or Pawnee coal seams.

Effluent shall be discharged in a manner to prevent erosion, scouring, or damage to stream banks, stream beds, ditches, or other waters of the state at the point of discharge. In addition, there shall be no deposition of substances in quantities which could result in significant aesthetic degradation, or degradation of habitat for aquatic life, plant life or wildlife; or which could adversely affect public water supplies or those intended for agricultural or industrial use.

Information gathered from the water quality monitoring stations may result in modification of the permit to protect existing uses on the tributary and the mainstem.

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of a visible sheen or visible hydrocarbon deposits on the bottom or shoreline of the receiving water.

2. Discharges shall be monitored by the permittee as specified below:

a. Monitoring of the initial discharge

Within 60 days of commencement of discharge, a sample shall be collected from each outfall and analyzed for the constituents specified below, at the required detection limits. *If a report containing results for all constituents listed below has previously been submitted to the WYPDES Program characterizing produced water quality for a particular outfall, the operator is not required to submit an additional initial monitoring report for the outfall in question, unless otherwise specified by WDEQ.* Within 120 days of commencement of discharge, a summary report on the produced water must be submitted to the Wyoming Department of Environmental Quality and the U.S. EPA Region 8 at the addresses listed below. This summary report must include the results and detection limits for each of the constituents listed below. In addition, the report must include written notification of the established location of the discharge point (refer to Part I.B.11). This notification must include a confirmation that the location of the established discharge point(s) is within 1,510 feet of the location of the identified discharge point(s), is within the same drainage, and discharges to the same landowner's property as identified on the original application form. The legal description and location in decimal degrees of the established discharge point(s) must also be provided. After receiving the monitoring results for the initial discharge, the routine monitoring requirements described in Part I.A.5.b. may be modified to require more stringent monitoring.

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Total Recoverable Aluminum, $\mu\text{g/l}$	50 $\mu\text{g/l}$	Grab
Dissolved Cadmium, $\mu\text{g/l}$	0.1 $\mu\text{g/l}$	Grab
Dissolved Calcium, mg/l	as mg/l	Grab
Dissolved Calcium, me/l	as me/l	Grab
Chlorides, mg/l	5 mg/l	Grab
Dissolved Copper, $\mu\text{g/l}$	1 $\mu\text{g/l}$	Grab
Dissolved Fluoride, $\mu\text{g/l}$	100 $\mu\text{g/l}$	Grab
Dissolved Iron, $\mu\text{g/l}$	30 $\mu\text{g/l}$	Grab
Total Hardness, mg/l	10 mg/l as CaCO_3	Grab
Dissolved Lead, $\mu\text{g/l}$	2 $\mu\text{g/l}$	Grab
Dissolved Magnesium, mg/l	as mg/l	Grab
Dissolved Magnesium, me/l	as me/l	Grab
Dissolved Mercury, $\mu\text{g/l}$	0.06 $\mu\text{g/l}$	Grab
pH, standard units	to 0.1 pH unit	Grab
Total Radium 226, pCi/l	0.2 pCi/l	Grab
Total Recoverable Selenium, $\mu\text{g/l}$	5 $\mu\text{g/l}$	Grab

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Dissolved Sodium, mg/l	as mg/l	Grab
Dissolved Sodium, me/l	as me/l	Grab
Sodium Adsorption Ratio, calculated as unadjusted for bicarbonate ratio	not applicable	Calculated
Specific Conductance, micromhos/cm	5 micromhos/cm	Grab
Sulfate, mg/l	10 mg/l	Grab
Total Alkalinity, mg/l	1 mg/l as CaCO ₃	Grab
Total Recoverable Arsenic, µg/l	1 µg/l	Grab
Total Recoverable Barium, µg/l	100 µg/l	Grab
Dissolved Zinc, µg/l	10 µg/l	Grab
Bicarbonate, mg/l	1 mg/l	Grab
Total Dissolved Solids, mg/l	5 mg/l	Grab

Initial monitoring reports are to be sent to the following addresses:

Planning and Targeting Program, 8ENF-PT
Office of Enforcement, Compliance, and Environmental Justice
U.S. EPA Region 8
999 18th St., Suite 300
Denver, CO 80202-2466

and

Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building, 4 West
122 West 25th Street
Cheyenne, WY 82002

b. Routine monitoring End of Pipe (001-008)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies. The first routine monitoring for the time frame during which the monitoring of initial discharge occurs will, at a minimum, consist of flow measurements for the duration of the six-month monitoring time frame. Reporting will be based on semi-annual time frames, from January through June, and from July through December.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Bicarbonate, mg/l	Monthly	Grab
Dissolved Calcium, mg/l	Monthly	Grab

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Calcium, me/l	Monthly	Grab
Chloride, mg/l	Annually	Grab
Dissolved Iron, µg/l	Once Every Six Months	Grab
Dissolved Magnesium, mg/l	Monthly	Grab
Dissolved Magnesium, me/l	Monthly	Grab
pH, standard units	Once Every Six Months	Grab
Dissolved Sodium, mg/l	Monthly	Grab
Dissolved Sodium, me/l	Monthly	Grab
Sodium Adsorption Ratio, unitless	Monthly	Calculated
Specific Conductance, µmhos/cm	Monthly	Grab
Total Alkalinity, mg/l as CaCO ₃	Monthly	Grab
Total Recoverable Arsenic, µg/l	Annually	Grab
Total Recoverable Barium, µg/l	Annually	Grab
Total Flow, MGD	Monthly	Continuous

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall of the final treatment unit which is located out of the natural drainage and prior to admixture with diluent waters.

c. Water Quality Monitoring Stations (TRIB1, ULPR, DLPR)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies. Monitoring will be based on monthly time frames, and reported semiannually.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Calcium, mg/l	Monthly	Grab
Dissolved Calcium, me/l	Monthly	Grab
Dissolved Magnesium, mg/l	Monthly	Grab
Dissolved Magnesium, me/l	Monthly	Grab

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Sodium, mg/l	Monthly	Grab
Dissolved Sodium, me/l	Monthly	Grab
Sodium Adsorption Ratio, unitless – calculated as unadjusted for bicarbonate ratio	Monthly	Calculated
Specific Conductance, μ mhos/cm	Monthly	Grab
Flow, MGD	Monthly	Instantaneous

See Table 1, Part I.B.12 of the permit for water quality monitoring station location information.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: a designated water quality monitoring station identified as TRIB1 in Table 1, Part I.B.12 of the permit below. Monthly water quality samples are to be collected at the water quality monitoring station when effluent from this CBM facility reaches the TRIB1 station located on White Tail Creek. If flow occurs at the TRIB1 station during a given monthly monitoring period, but this CBM facility did not contribute to that flow, the permittee will report "did not contribute" in the discharge monitoring reports for that monthly monitoring period. Under such circumstances, it will be the responsibility of the permittee to demonstrate that the effluent from this facility did not contribute to the flow occurring at the TRIB1 station. If no flow at all occurs at the TRIB1 station for an entire monthly monitoring period, then "no flow" is to be reported and samples need not be collected at the three water quality monitoring stations for that monthly monitoring period.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by, the permit issuing authority.

2. Reporting

Results of initial monitoring, including the date the discharge began, shall be summarized on a Monitoring Report Form for Monitoring of Initial Discharge and submitted to the state water pollution control agency at the address below postmarked no later than 120 days after the commencement of discharge.

Results of routine end of pipe and water quality station monitoring during the previous six (6) months shall be summarized and reported semiannually on a Discharge Monitoring Report Form (DMR). If the discharge is intermittent, the date the discharge began and ended must be

included. The information submitted on the first semiannual DMR shall contain a summary of flow measurements and any additional monitoring conducted subsequent to the submittal of the initial monitoring report. If required, whole effluent toxicity testing (biomonitoring) results must be reported on the most recent version of EPA Region VIII's Guidance for Whole Effluent Reporting. Monitoring reports must be submitted to the state water pollution control agency at the following address postmarked no later than the 15th day of the second month following the completed reporting period. The first report following issuance of this renewal is due by February 15, 2007.

Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements contained in Part II.A.11.

Wyoming Department of Environmental Quality
 Water Quality Division
 Herschler Building, 4 West
 122 West 25th Street
 Cheyenne, WY 82002
 Telephone: (307) 777-7781

If no discharge occurs during the reporting period, "no discharge" shall be reported. If discharge is intermittent during the reporting period, sampling shall be done while the facility is discharging.

3. Definitions

- a. The "monthly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform) of all composite and/or grab samples collected during a calendar month.
- b. The "weekly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform) of all composite and/or grab samples collected during any week.
- c. The "daily maximum" shall be determined by the analysis of a single grab or composite sample.
- d. "MGD", for monitoring requirements, is defined as million gallons per day.
- e. "Net" value, if noted under Effluent Characteristics, is calculated on the basis of the net increase of the individual parameter over the quantity of that same parameter present in the intake water measured prior to any contamination or use in the process of this facility. Any contaminants contained in any intake water obtained from underground wells shall not be adjusted for as described above and, therefore, shall be considered as process input to the final effluent. Limitations in which "net" is not noted are calculated on the basis of gross measurements of each parameter in the discharge, irrespective of the quantity of those parameters in the intake waters.
- f. A "composite" sample, for monitoring requirements, is defined as a minimum of four grab samples collected at equally spaced two hour intervals and proportioned according to flow.

- g. An "instantaneous" measurement for monitoring requirements is defined as a single reading, measurement, or observation.
- h. A "pollutant" is any substance or substances which, if allowed to enter surface waters of the state, causes or threatens to cause pollution as defined in the Wyoming Environmental Quality Act, Section 35-11-103.
- i. "Total Flow" is the total volume of water discharged, measured on a continuous basis and reported as a total volume for each month during a reporting period. The accuracy of flow measurement must comply with Part III.A.1.

4. **Test Procedures**

Test procedures for the analysis of pollutants, collection of samples, sample containers, sample preservation, and holding times, shall conform to regulations published pursuant to 40 CFR, Part 136, unless other test procedures have been specified in this permit.

5. **Recording of Results**

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses and collected the samples;
- d. The analytical techniques or methods used; and
- e. The results of all required analyses including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine the results.

6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the administrator at any time. Data collected on site, copies of Discharge Monitoring Reports and a copy of this WYPDES permit must be maintained on site during the duration of activity at the permitted location.

8. **Penalties for Tampering**

The Act provides that any person who falsifies, tampers with or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by Imprisonment for not more than two years per violation, or both.

9. **Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

10. **Facility Identification**

All facilities discharging produced water shall be clearly identified with an all-weather sign posted at each outfall and flow monitoring locations (points of compliance). This sign shall, as a minimum, convey the following information:

- a. The name of the company, corporation, person(s) who holds the discharge permit, and the WYPDES permit number;
- b. The contact name and phone number of the person responsible for the records associated with the permit;
- c. The name of the facility (lease, well number, etc.) and the outfall number as identified by the discharge permit.

11. **Identification and Establishment of Discharge Points**

According to 40 CFR 122.21(k)(1), the permittee shall identify the expected location of each discharge point on the appropriate WYPDES permit application form. The location of the discharge point must be identified to within an accuracy of 15 seconds. This equates to a distance of 1,510 feet.

In order for the permit not to be subjected to additional public notice, the location of the established discharge point must be within 1,510 feet of the location of the discharge point originally identified on the permit application. In addition, the discharge must be within the same drainage and must discharge to the same landowner's property as identified on the original application form. If the three previously stated requirements are not satisfied, modification of the discharge point location(s) constitutes a major modification of the permit. The permittee shall provide written notification of the establishment of each discharge point in accordance with Part I.A.5.a above.

12. **Location of Discharge Points, Irrigation Compliance Points, and Water Quality Monitoring Stations**

As of the date of permit issuance, authorized points of discharge were as follows:

SEE TABLE 1 FOR A LIST OF OUTFALLS, IRRIGATION COMPLIANCE POINTS,
AND WATER QUALITY MONITORING STATIONS

Table 1: WY0045799 - Squaw Creek Development

Out-Fall	Qtr/Qtr	SECT	TWP (N)	RNG (W)	LATITUDE	LONGITUDE	Drainage / Description	Groundwater approval required prior to Discharge?	Reservoir Bond to WDEQ Required Prior to Discharge
001	NESW	34	56	73	44.78815	-105.63045	Discharges to on-channel reservoir "T56NR73W34NESW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
002	NENW	3	55	73	44.78064	-105.62815	Discharges to on-channel reservoir "T55NR73W3NENW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
003	NENW	36	56	73	44.79762	-105.58863	Discharges to on-channel reservoir "T56NR73W36NENW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
004	SESE	34	56	73	44.78485	-105.61779	Discharges to on-channel reservoir "T56NR73W34SESE" in unnamed ephemeral tributary to White Tail Creek	NO	YES
005	SESW	34	56	73	44.79255	-105.62614	Discharges to on-channel reservoir "T56NR73W34SESW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
006	NESW	35	56	73	44.79070	-105.61009	Discharges to on-channel reservoir "T56NR73W35NESW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
007	NWNW	35	56	73	44.79552	-105.61253	Discharges to on-channel reservoir "T56NR73W35NWNW" in unnamed ephemeral tributary to White Tail Creek	NO	YES
008	NESE	26	56	73	44.79561	-105.61219	Discharges to on-channel reservoir "T56NR73W26NESE" in unnamed ephemeral tributary to White Tail Creek	NO	YES
TRIB1	SESW	10	55	71	44.76126	-105.37999	Tributary monitoring station on White Tail Creek		
ULPR	SESW	11	55	71	44.76520	-105.36778	Upstream Little Powder River monitoring station (above White Tail Creek)		
DLPR	NESW	3	55	71	44.77800	-105.38216	Downstream Little Powder River monitoring station (above White Tail Creek)		

The outfalls listed in Table 1 (Part I.B.12) may be moved from the established location without submittal of a permit modification application provided all of the following conditions are satisfied:

1. The new outfall location is within 2640 feet of the established outfall location.
2. The new outfall location is within the same drainage or immediate permitted receiving waterbody.
3. There is no change in the affected landowners.
4. Notification of the change in outfall location must be provided to the WYPDES Permits Section on a form provided by the WQD Administrator within 10 days of the outfall location change. The form must be provided in duplicate and legible maps showing the previous and new outfall location must be attached to the form.

Moving an outfall location without satisfying the four above listed conditions will be considered a violation of this permit and subject to full enforcement authority of the WQD.

Outfall relocation as described above will not be allowed if the new outfall location is less than one mile from the confluence of a Class 2 waterbody and the dissolved iron limits established in the permit for the outfall are based upon Class 3 standards.

Requests for modification of the above list will be processed as follows. If the requested modification satisfies the definition of a minor permit modification as defined in 40 CFR 122.63 modifications will not be required to be advertised in a public notice. A minor modification constitutes a correction of a typographical error, increase in monitoring and/or reporting, revision to an interim compliance schedule date, change in ownership, revision of a construction schedule for a new source discharger, deletion of permitted outfalls, and/or the incorporation of an approved local pretreatment program.

A request for a minor modification must be initiated by the permittee by completing the form titled Wyoming Pollutant Discharge Elimination System Permit Modification Application for Coal Bed Methane. Incomplete application forms will be returned to the applicant.

C. RESERVOIR / IMPOUNDMENT REQUIREMENTS

1. Groundwater Monitoring Beneath Impoundments:

Table 1 of the permit above identifies which outfalls (if any) are designed to discharge into impoundments that are subject to groundwater monitoring requirements established in the latest version of the Water Quality Division guideline "*Compliance Monitoring for Groundwater Protection Beneath Unlined Coalbed Methane Produced Water Impoundments.*" These specified outfalls are not authorized to discharge until a written groundwater compliance approval has been granted by the Groundwater Pollution Control Program of the Water Quality Division. A groundwater compliance approval will consist of either a final approved groundwater compliance monitoring plan, or written authorization for an exemption thereof. Once an impoundment has been granted a written groundwater compliance approval, the contributing outfall(s) to that reservoir may commence discharge.

2. Reclamation Performance Bonds for On-Channel Reservoirs:

Table 1 of the permit above also identifies which outfalls (if any) are designed to discharge into impoundments that are subject to WDEQ bonding requirements, as set forth in the latest version of the Water Quality Division guideline "*Implementation Guidance for Reclamation and Bonding of On-Channel Reservoirs That Store Coalbed Natural Gas Produced Water.*" These specified outfalls are not authorized to discharge until the associated reservoir reclamation bond is approved by WDEQ. Once the reservoir reclamation bond is approved by WDEQ, the contributing outfall(s) to that reservoir may commence discharge.

Any discharge into an above-listed impoundment which has not been secured by the required WDEQ-approved bond, or which has not been granted the required groundwater compliance approval, will constitute a violation of this permit, and may result in enforcement action from the Water Quality Division.

PART IIA. MANAGEMENT REQUIREMENTS1. Changes

The permittee shall give notice to the administrator of the Water Quality Division as soon as possible of any physical alterations or additions to the permitted facility. Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29 (b); or
- b. The alteration or addition could change the nature or increase the quantity of pollutants discharged.

2. Noncompliance Notification

- a. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b. The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Quality Division, Wyoming Department of Environmental Quality at (307) 777-7781.
- c. For any incidence of noncompliance, including noncompliance related to non-toxic pollutants or non-hazardous substances, a written submission shall be provided within five (5) days of the time that the permittee becomes aware of the noncompliance circumstance.

The written submission shall contain:

- (1) A description of the noncompliance and its cause;
 - (2) The period of noncompliance, including exact dates and times;
 - (3) The estimated time noncompliance is expected to continue if it has not been corrected; and
 - (4) Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- d. The following occurrences of unanticipated noncompliance shall be reported by telephone to the Water Quality Division, Watershed Management Section, NPDES Program (307) 777-7781 as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances.
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;